

## 3.10 NOISE

This EIR section analyzes the potential for adverse impacts on noise and groundborne vibration resulting from implementation of the proposed project. The Initial Study (Appendix A) identified the potential for impacts associated with a substantial temporary and/or permanent increase in ambient noise levels within or around the project site or exposure of people to excessive noise levels, groundborne vibration, or groundborne noise levels and whether this exposure is in excess of standards established in the local general plan or noise ordinance. Issues scoped out include proximity to or association with an airport land use plan or airstrip, as the project site is not located within an airport land use plan or affected area near an airstrip. Data used to prepare this section were taken from information obtained by measuring and modeling existing and future noise levels at the project site and in the surrounding area. Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document.

### 3.10.1 Existing Conditions

#### *Fundamentals of Sound and Environmental Noise*

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

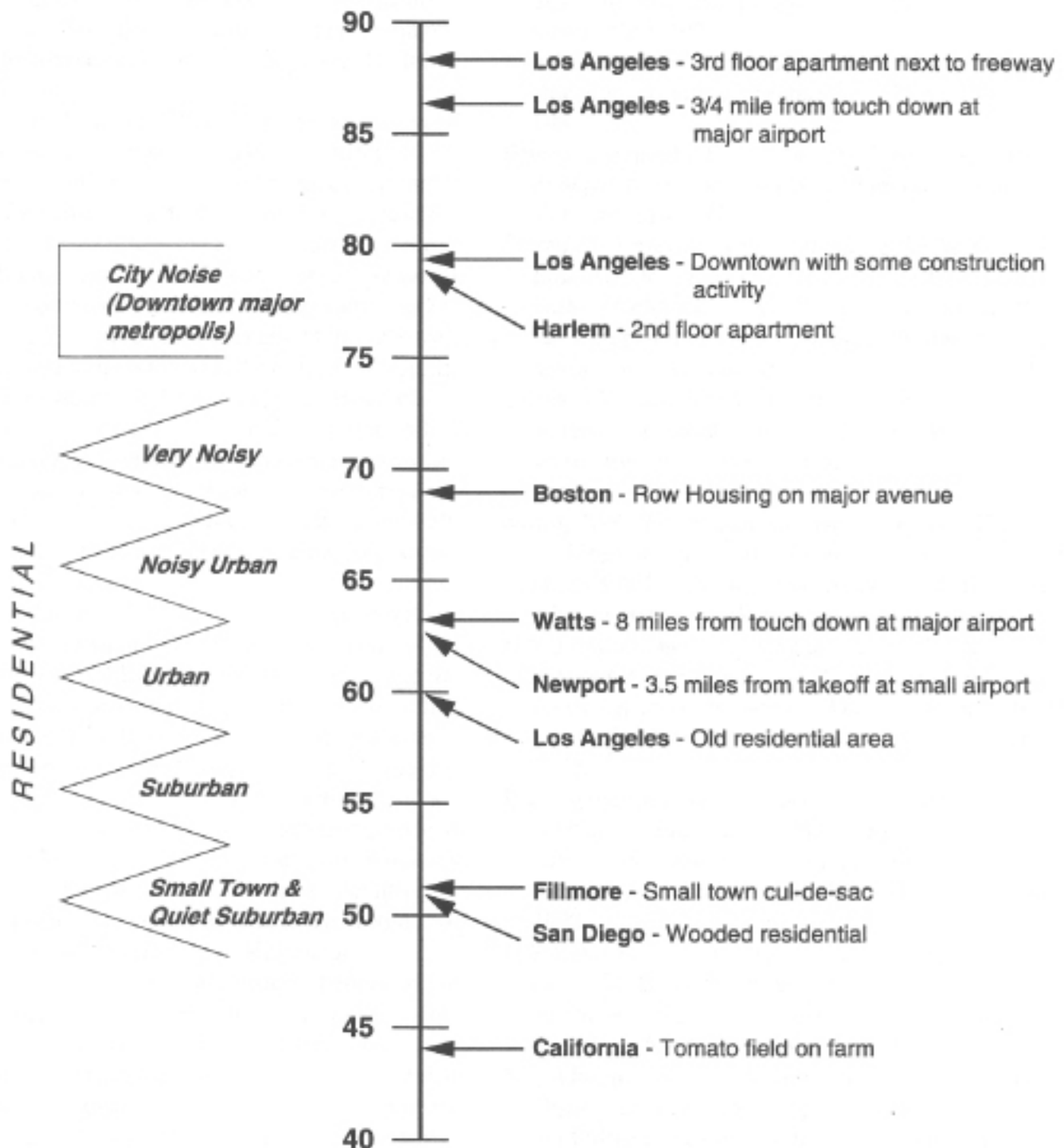
Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady “background” noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Figure 3.10-1 and Table 3.10-1 list representative noise levels for the environment.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

**QUALITATIVE  
DESCRIPTIONS**

**Noise Level  
in dBA CNEL**

**OUTDOOR LOCATIONS**



Not to Scale

SOURCE: State of California General Plan Guidelines, 1998

10261-00



**Representative Environmental Noise Levels**

City of Huntington Beach • Pacific City EIR

FIGURE 3.10-1

**Table 3.10-1 Representative Environmental Noise Levels**

| <i>Common Outdoor Activities</i>     | <i>Noise Level (dBA)</i> | <i>Common Indoor Activities</i>             |
|--------------------------------------|--------------------------|---|
|                                      | —110—                    | Rock Band                                   |
| Jet Fly-over at 100 feet             |                          |   |
|                                      | —100—                    |   |
| Gas Lawnmower at 3 feet              |                          |   |
|                                      | —90—                     |   |
|                                      |                          | Food Blender at 3 feet                      |
| Diesel Truck going 50 mph at 50 feet | —80—                     | Garbage Disposal at 3 feet                  |
| Noisy Urban Area during Daytime      |                          |   |
| Gas Lawnmower at 100 feet            | —70—                     | Vacuum Cleaner at 10 feet                   |
| Commercial Area                      |                          | Normal Speech at 3 feet                     |
| Heavy Traffic at 300 feet            | —60—                     |   |
|                                      |                          | Large Business Office                       |
| Quiet Urban Area during Daytime      | —50—                     | Dishwasher in Next Room                     |
|                                      |                          |   |
| Quiet Urban Area during Nighttime    | —40—                     | Theater, Large Conference Room (background) |
| Quiet Suburban Area during Nighttime |                          |   |
|                                      | —30—                     | Library                                     |
| Quiet Rural Area during Nighttime    |                          | Bedroom at Night, Concert Hall (background) |
|                                      | —20—                     |   |
|                                      |                          | Broadcast/Recording Studio                  |
|                                      | —10—                     |   |
| Lowest Threshold of Human Hearing    | —0—                      | Lowest Threshold of Human Hearing           |

SOURCE: California Department of Transportation 1998

- $L_{eq}$ , the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the  $L_{eq}$  of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- $L_{dn}$ , the Day Night Average Level, is a 24-hour average  $L_{eq}$  with a 10 dBA “weighting” added to noise during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the nighttime.
- $L_{min}$ , the minimum instantaneous noise level experienced during a given period of time.
- $L_{max}$ , the maximum instantaneous noise level experienced during a given period of time.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60-to 70-dBA range, and high above 70 dBA.

Examples of low daytime levels are isolated, natural settings that can provide noise levels as low as 20 dBA and quiet, suburban, residential streets that can provide noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA).

When evaluating changes in 24-hour community noise levels, a difference of 3 dBA is a barely perceptible increase to most people. A 5 dBA increase is readily noticeable, while a difference of 10 dBA would be perceived as a doubling of loudness.

Noise levels from a particular source decline as distance to the receptor increases. Other factors, such as the weather and reflecting or shielding, also help intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA at acoustically “hard” locations (i.e., the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically “soft” locations (i.e., the area between the source and receptor is normal earth or has vegetation, including grass). Noise from stationary or point sources is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more.

### ***Fundamentals of Environmental Groundborne Vibration***

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second and, in the U.S., is referenced as vibration decibels (VdB).

The background vibration velocity level in residential and educational areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as operation

of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

The general human response to different levels of groundborne vibration velocity levels is described in Table 3.10-2.

| <b>Table 3.10-2 Human Response to Different Levels of Groundborne Vibration</b> |  |
|---|--|
| <i>Vibration Velocity Level</i>   | <i>Human Reaction</i>  |
| 65 VdB  | Approximate threshold of perception for many people.   |
| 75 VdB  | Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable. |
| 85 VdB  | Vibration acceptable only if there are an infrequent number of events per day.   |

SOURCE: Federal Railroad Administration 1998

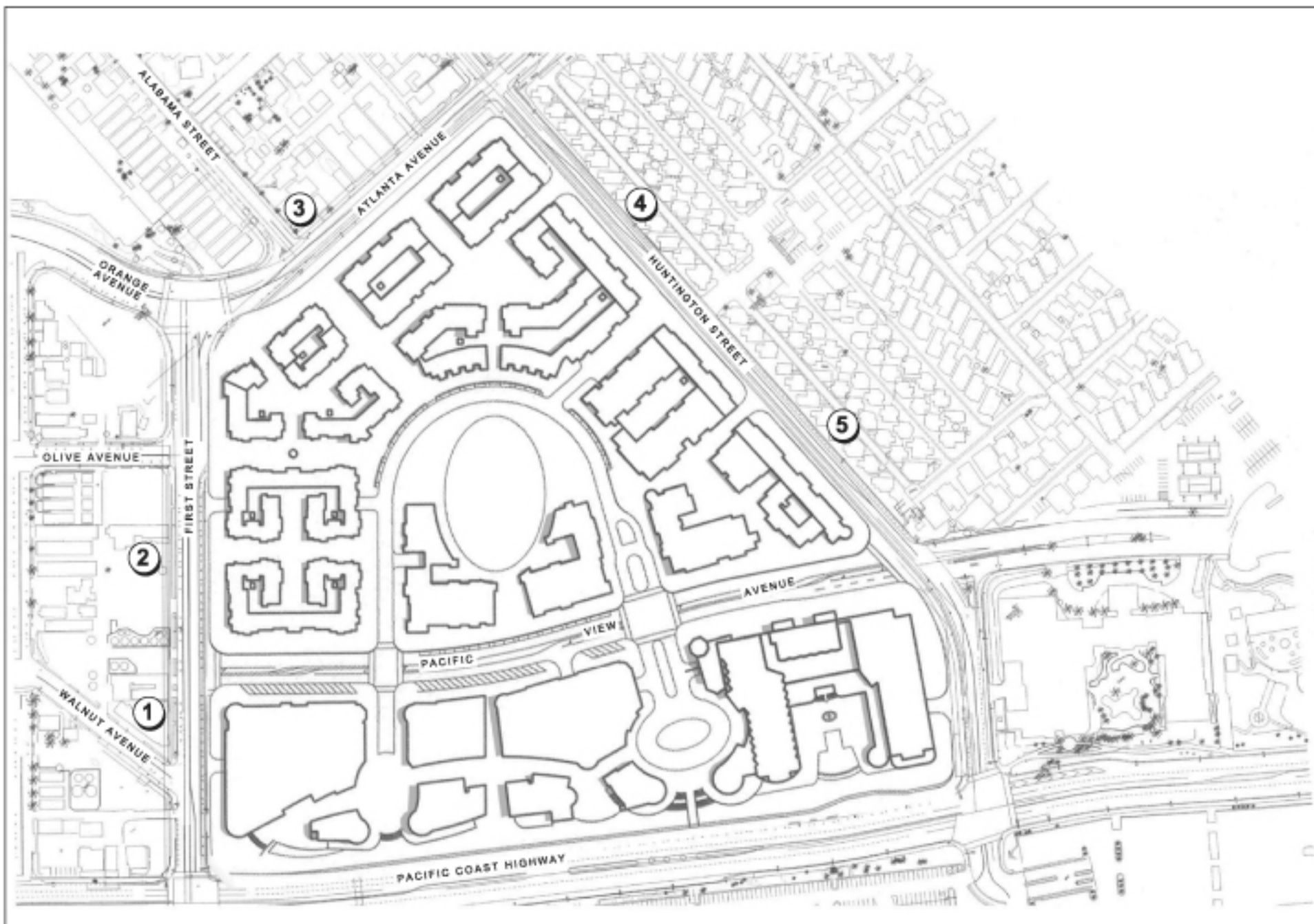
### ***Existing Ambient Daytime Noise Levels***

Land uses in the vicinity of the proposed project site include residential, commercial, and recreational uses. Although other noise sources occur in the vicinity, vehicular traffic is the primary source of noise at, and around, the project site.

Existing ambient daytime noise levels were measured at five selected locations around the project site on February 19, 2003. These locations are identified in Figure 3.10-2. The noise levels were measured using a Larson-Davis Model 814 precision sound level meter, which satisfies the American National Standards Institute (ANSI) for general environmental noise measurement instrumentation. The average noise levels and sources of noise measured at each location are identified in Table 3.10-3. These daytime noise levels are characteristic of an urban environment.

| <b>Table 3.10-3 Existing Daytime Noise Levels at Selected On- and Off-Site Locations</b> |                              |                               |                        |                        |
|--|------------------------------|-------------------------------|------------------------|------------------------|
| <i>Noise Measurement Location</i>  | <i>Primary Noise Sources</i> | <i>Noise Level Statistics</i> |                        |                        |
|  |                              | <i>L<sub>eq</sub></i>         | <i>L<sub>min</sub></i> | <i>L<sub>max</sub></i> |
| 1. Apartment Building  | Traffic on First Street      | 62.3                          | 49.3                   | 77.8                   |
| 2. Single Family Residence   | Traffic on First Street      | 62.8                          | 42.1                   | 77.4                   |
| 3. Single Family Residence   | Traffic on Atlanta Avenue    | 64.6                          | 43.1                   | 78.6                   |
| 4. Mobile Home   | Traffic on Huntington Street | 64.7                          | 41.2                   | 84.3                   |
| 5. Mobile Home   | Traffic on Huntington Street | 66.5                          | 46.6                   | 85.3                   |

SOURCE: EIP Associates 2003



Not to Scale

SOURCE: EIP Associates 2003



**EIP**  
ASSOCIATES

**FIGURE 3.10-2**  
**Noise Measurement Locations**

City of Huntington Beach • Pacific City EIR

### Existing Roadway Noise Levels on Site

Existing 24-hour noise levels have been calculated for various roadways around the proposed project site. This task was accomplished using the Federal Highway Administration Highway Noise Prediction Model (FHWA-RD-77-108) and traffic volumes from the project traffic analysis (included as Appendix C). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data show that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The calculated noise levels are presented in Table 3.10-4 along with the distances to various noise level contours.

**Table 3.10-4 Existing Roadway Noise Levels On Site**

| Roadway               | Roadway Segment                         | Reference $L_{dn}$ at<br>100 Feet <sup>1</sup> | Distance to Noise Contour <sup>2</sup> |             |             |
|-----------------------|---|--|--|-------------|-------------|
|                       |   |  | 70 $L_{dn}$                            | 65 $L_{dn}$ | 60 $L_{dn}$ |
| First Street          | Atlanta Avenue to Pacific Coast Highway | 56.0   | —                                      | —           | 54          |
| Atlanta Avenue        | First Street to Huntington Avenue       | 57.9   | —                                      | —           | 72          |
| Huntington Avenue     | Atlanta Avenue to Pacific Coast Highway | 50.9   | —                                      | —           | —           |
| Pacific Coast Highway | Huntington Avenue to First Street       | 66.3   | 57                                     | 123         | 265         |

1. Distances are in feet from roadway centerline. The identified noise level at 100 feet from the roadway centerline is for reference purposes only as a point from which to calculate the noise contour distances. It does not reflect an actual building location or potential impact location.

2. Noise contour is located within the roadway lanes.

SOURCE: EIP Associates 2003. Calculation data and results are provided in Appendix C.

### Existing Roadway Noise Levels Off Site

Existing roadway noise levels were also calculated for the roadway links in the vicinity of the project site that have noise sensitive uses fronting the roadways. As with on-site noise levels, this was accomplished using the FHWA Highway Noise Prediction Model and traffic volumes from the project traffic analysis (included as Appendix C). The average daily noise levels along these roadway segments are presented in Table 3.10-5.

### Existing Groundborne Vibration

Aside from seismic events, the greatest regular sources of groundborne vibration at the proposed site and immediate vicinity are roadway truck and bus traffic. These trucks and buses typically generate groundborne vibration velocity levels of around 63 VdB. These levels could reach 72 VdB where trucks and buses pass over bumps in the road.

**Table 3.10-5 Existing Roadway Noise Levels Off Site**

| <i>Roadway</i>        | <i>Roadway Segment</i>                      | <i>Noise Sensitive Uses</i>         | <i>dBA L<sub>dn</sub></i> |
|-----------------------|---|-------------------------------------|---------------------------|
| Pacific Coast Highway | 17 <sup>th</sup> St. to 9 <sup>th</sup> St. | Multifamily Residential             | 67.3                      |
| Beach Boulevard       | Pacific Coast Hwy. to Atlanta Ave.          | Single-Family Residential           | 59.7                      |
|                       | Atlanta Ave. to Indianapolis Ave.           | Single-Family Residential           | 63.1                      |
|                       | Indianapolis Ave. to Adams Ave.             | Single- and Multifamily Residential | 64.6                      |
| Lake Street           | Adams Ave. to Indianapolis Ave.             | Single- Family Residential          | 60.6                      |
| Indianapolis Avenue   | Beach Blvd. to Newland St.                  | Single- Family Residential          | 57.6                      |
| Atlanta Avenue        | Newland St. to Beach Blvd.                  | Multifamily Residential             | 62.3                      |
|                       | Beach Blvd. to Delaware St.                 | Single- and Multifamily Residential | 64.8                      |
|                       | Delaware St. to Huntington Ave.             | Single- and Multifamily Residential | 63.1                      |
|                       | Huntington Ave. to 1 <sup>st</sup> St.      | Single- and Multifamily Residential | 61.3                      |
| Main Street           | Adams Ave. to Palm Ave.                     | Single- Family Residential          | 58.7                      |
| First Street          | Pacific Coast Hwy. to Atlanta Ave.          | Single- Family Residential          | 59.4                      |
| Huntington Avenue     | Pacific Coast Hwy. to Atlanta Ave.          | Single- and Multifamily Residential | 54.4                      |

SOURCE: EIP Associates 2003. Calculation data and results are provided in Appendix C.

### 3.10.2 Regulatory Framework

There are no federal regulations related to noise that apply to the proposed project.

#### State

Title 24 of the California Code of Regulations codifies Sound Transmission Control requirements, which establishes uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 24 states that interior noise levels attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room of new dwellings. Dwellings are to be designed so that interior noise levels will meet this standard for at least ten years from the time of building permit application.

#### Local

#### General Plan Noise Element

The California Government Code requires that a noise element be included in the general plan of each county and city in the state. The Noise Element of the City of Huntington Beach General Plan is a comprehensive program for including noise control in the planning process. It is a tool that City planners use to achieve and maintain compatible land uses with environmental noise levels.



The Noise Element incorporates noise standards developed by the Office of Noise Control in the State Department of Health Services as the primary tool the City uses to assess the compatibility between land uses and outdoor noise. As such, the City uses a noise level standard of 60 dBA  $L_{dn}$  for the exterior living areas of new residential land uses, and 45 dBA  $L_{dn}$  for the interior of all new residential uses.

Table 3.10-6 identifies goals and objectives presented in the Noise Element of the General Plan related to noise that are potentially relevant to the proposed project. This table also includes an assessment of the proposed project's consistency with the policies adopted in support of these goals and objectives.

| <b>Table 3.10-6 General Plan Noise Element—Policies Applicable to Noise</b>   |   |
|---|---|
| <b>Goal, Objective, or Policy</b>   | <b>Project Consistency</b>  |
| <b>Goal N 1.</b> Ensure that all necessary and appropriate actions are taken to protect Huntington Beach residents, employees, visitors, and noise sensitive uses from the adverse impacts created by excessive noise levels from stationary and ambient sources.   | Conformance with implementing policies, as discussed below, results in conformance with this goal.  |
| <b>Objective N 1.2.</b> Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise sensitive uses of Huntington Beach.   | Conformance with implementing policies, as discussed below, results in conformance with this objective.   |
| <b>Policy N 1.2.1.</b> Require, in areas where noise levels exceed an exterior $L_{dn}$ of 60 dBA and an interior $L_{dn}$ of 45 dBA, that all new development of "noise sensitive" land uses, such as housing, health care facilities, schools, libraries, and religious facilities, include appropriate buffering and/or construction mitigation measures that will reduce noise exposure to levels within acceptable limits. | This section of the EIR includes MM N-1 to ensure that noise levels in the exterior living environments of the proposed residential uses meet City standards. |
| <b>Policy N 1.2.2.</b> Require new industrial and new commercial land uses or the major expansion of existing land uses to demonstrate that the new or expanded use would not be directly responsible for causing ambient noise levels to exceed an exterior $L_{dn}$ of 65 dBA on areas containing "noise sensitive" land uses as depicted on Figure N-1 [of the General Plan].  | The noise levels associated with traffic and mechanical equipment from the proposed project would not exceed City standards at nearby noise sensitive uses.   |
| <b>Policy N 1.2.3.</b> Require development, in all areas where the ambient noise level exceeds an $L_{dn}$ of 60 dBA, to conduct an acoustical analysis and incorporate special design measures in their construction, thereby, reducing interior noise levels to the 45 dBA $L_{dn}$ level.  | This section of the EIR concludes that interior noise levels within the proposed buildings would not exceed 45 dBA $L_{dn}$ .                                 |

**Table 3.10-6 General Plan Noise Element—Policies Applicable to Noise**

| <i>Goal, Objective, or Policy</i>   | <i>Project Consistency</i>  |
|---|---|
| <b>Policy N 1.2.5.</b> Require development that generates increased traffic and subsequent increases in the ambient noise levels adjacent to noise sensitive land uses to provide for appropriate mitigation measures in accordance with acceptable limits of the City Noise Ordinance. | This section of the EIR concludes that proposed project would generate increased local traffic volumes, but would not cause a substantial permanent increase in ambient roadway noise levels. No mitigation measures are required or recommended. |
| <b>Objective N 1.3.</b> Minimize the adverse impacts of traffic-generated noise on residential and other “noise sensitive” uses.  | Conformance with implementing policies, as discussed below, results in conformance with this objective.   |
| <b>Policy N 1.3.1.</b> Require all new non-residential development to design and configure on-site ingress and egress points diverting traffic away from nearby “noise-sensitive” land uses to the greatest degree practicable.   | This section of the EIR concludes that proposed project would generate increased local traffic volumes, but would not cause a substantial permanent increase in ambient roadway noise levels.   |
| <b>Policy N 1.3.7.</b> Provide for the development of alternate transportation modes such as bicycle paths and pedestrian walkways to minimize the number of noise generating automobile trips.   | The proposed project includes pedestrian walkways that link the project site to the area surrounding the project site. This could reduce the number of vehicles trips made of residents, employees, and visitors of the project.                  |
| <b>Policy N 1.3.10.</b> Require that mechanical equipment, such as air conditioning units or pool equipment, comply with the City’s Noise Ordinance and Zoning and Subdivision Ordinance.   | This section of the EIR concludes that mechanical equipment associated with the proposed uses would not exceed City standards at nearby buildings.  |
| <b>Objective N 1.4.</b> Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or “noise-sensitive” uses.   | Conformance with implementing policies, as discussed below, results in conformance with this objective.   |
| <b>Policy N 1.4.1.</b> Require that the automobile and truck access of commercial or industrial land uses abutting residential parcels to be located at the maximum practical distance from the nearest residential parcels.  | The proposed hotel and visitor-serving commercial uses would be located across Pacific View Avenue from the proposed residential uses.  |
| <b>Policy N 1.4.2.</b> Require that the loading and shipping facilities of commercial and industrial land uses abutting residential parcels to be located and designed to minimize the potential noise impacts upon residential parcels.  | The proposed hotel and visitor-serving commercial uses would be located across Pacific View Avenue from the proposed residential uses. The loading and shipping facilities would be located below grade and would not abut residential uses.      |
| <b>Policy N 1.4.3.</b> Require that the parking areas of all commercial and industrial land uses, which abut residential areas, to be buffered and shielded by walls, fences, or adequate landscaping.  | The parking areas for the proposed hotel and visitor-serving commercial uses would be located below grade.  |

**Table 3.10-6 General Plan Noise Element—Policies Applicable to Noise**

| <i>Goal, Objective, or Policy</i>   | <i>Project Consistency</i>  |
|---|---|
| <b>Policy N 1.4.4.</b> Require that the parking structures of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent uses.   | The parking areas for the proposed hotel and visitor-serving commercial uses would be located below grade.  |
| <b>Policy N 1.4.5.</b> Require commercial or industrial truck delivery hours to land use abutting residential uses to be limited unless there is no feasible alternative of there are overriding transportation benefits.   | The proposed hotel and visitor-serving commercial uses would be located across Pacific View Avenue from the proposed residential uses. The loading and shipping facilities would be located below grade and not abut residential uses.  |
| <b>Objective N 1.6.</b> Minimize the impacts of construction noise on adjacent uses.  | Conformance with implementing policies, as discussed below, results in conformance with this objective.   |
| <b>Policy N 1.6.1.</b> Ensure that construction activities be regulated to establish hours of operation, to prevent and/or mitigate the generation of excessive or adverse noise impacts through the implementation of the existing Noise Ordinance and/or any future revisions to the Noise Ordinance.   | The hours of construction activities would be limited in accordance with the Huntington Beach Municipal Code.   |
| <b>Objective N 1.7.</b> Ensure that buildings are constructed to prevent adverse noise transmission between differing uses or tenants located in the same commercial structure and individual dwelling units in multifamily residential structures.   | The proposed buildings would be constructed in accordance with the specifications identified in the Huntington Beach Municipal Code.  |
| <b>Policy N 1.7.1.</b> Rigorously enforce the applicable provisions of the Uniform Building Code and City of Huntington Beach Municipal Code which prevent the transmission of excessive and unacceptable noise levels between individual tenants and businesses in commercial structures and between individual tenants and businesses in commercial structures and between individual dwelling units in multifamily residential structures. | The proposed buildings would be constructed in accordance with the specifications identified in the Huntington Beach Municipal Code.  |
| <b>Objective N 1.8.</b> Minimize the generation of excessive noise level impacts from entertainment and restaurant/bar establishments into adjacent residential or “noise sensitive” land uses.   | Conformance with implementing policies, as discussed below, results in conformance with this objective.   |
| <b>Policy N 1.8.1.</b> Require that entertainment and restaurant/bar uses take appropriate steps to control the activities of their patrons on-site, as well as within a reasonable and legally justified distance or proximity to minimize potential noise-related impacts on adjacent residential neighborhoods.  | The proposed hotel and visitor-serving commercial uses would be located across Pacific View Avenue from the proposed residential uses. Noise generated by entertainment and restaurant/bar uses would be limited and enforced in accordance with the Huntington Beach Municipal Code. |

**Table 3.10-6 General Plan Noise Element—Policies Applicable to Noise**

| <i>Goal, Objective, or Policy</i>  | <i>Project Consistency</i>  |
|--|---|
| <b>Policy N 1.8.2.</b> Discourage the development of new nightclubs, discotheques, and other high noise-generating entertainment uses that may impact residential neighborhoods, schools, health care facilities, or other “noise sensitive” land uses, unless it can be demonstrated that adequate measures can be installed and employed to adequately mitigate the potential impacts of on-site operations and/or off-site customer access and activities of these establishments upon these areas. | The proposed hotel and visitor-serving commercial uses would be located across Pacific View Avenue from the proposed residential uses. Noise generated by entertainment and restaurant/bar uses would be limited and enforced in accordance with the Huntington Beach Municipal Code. |
| <b>Objective N 1.12.</b> Ensure any use determined (by the City of Huntington Beach) to be a potential generator of significant stationary noise impacts, be properly analyzed and ensure that the recommended mitigation measures are implemented.  | Conformance with implementing policies, as discussed below, results in conformance with this objective.   |
| <b>Policy N.1.12.1.</b> Require detailed and independent acoustical studies be conducted for any new or renovated land uses or structures determined to be potential major stationary noise sources. Recommended mitigation measures must be successfully implemented and tested, prior to the issuance of a Certificate of Occupancy for the land use or structure.   | This section of the EIR concludes that mechanical equipment associated with the proposed uses would not exceed City standards at nearby buildings. No mitigation measures are required or recommended.  |
| <b>Policy N.1.12.2.</b> Encourage major stationary noise generating sources throughout the City of Huntington Beach to install additional noise buffering or reduction mechanisms within their facilities to reduce noise generation levels to the lowest extent practicable prior to the renewal of Conditional Use Permits or business licenses or prior to the approval and/or issuance of new Conditional Use Permits for said facilities.   | This section of the EIR concludes that mechanical equipment associated with the proposed uses would not exceed City standards at nearby buildings. No mitigation measures are required or recommended.  |

## Municipal Code—Noise Ordinance

The City of Huntington Beach has also adopted a Noise Ordinance (Chapter 8.40 of the Huntington Beach Municipal Code), which identifies exterior and interior noise standards, specific noise restrictions, exemptions, and variances for sources of noise within the city. The Noise Ordinance applies to all noise sources with the exception of any vehicle that is operated upon any public highway, street or right-of-way, or to the operation of any off-highway vehicle, to the extent that it is regulated in the State Vehicle Code, and all other sources of noise that are specifically exempted.

The City's exterior noise standards are identified in Table 3.10-7, along with the exterior noise levels that are prohibited. Table 3.10-8 identifies the City's interior noise standards and prohibited interior noise levels. In both cases, if the ambient noise level is greater than the identified noise standards, the noise standard becomes the ambient noise level without the offending noise.

**Table 3.10-7 City of Huntington Beach Noise Ordinance Exterior Noise Standards**

| Noise Zone | Noise Zone Land Uses  | Noise Level                        | Time Period                            |
|------------|---|------------------------------------|--|
| 1          | All Residential Properties                                  | 55 dBA $L_{eq}$<br>50 dBA $L_{eq}$ | 7 A.M. to 10 P.M.<br>10 P.M. to 7 A.M. |
| 2          | All Professional Office and Public Institutional Properties | 55 dBA $L_{eq}$                    | Anytime                                |
| 3          | All Commercial Properties Except Professional Office        | 60 dBA $L_{eq}$                    | Anytime                                |
| 4          | All Industrial Properties                                   | 70 dBA $L_{eq}$                    | Anytime                                |

**Exterior Noise Levels Prohibited:**

It shall be unlawful for any person at any location within the incorporated area of the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured on any residential, public institutional, professional, commercial or industrial property, either within or without the City, to exceed the applicable noise standards:

- (a) For a cumulative period or more than thirty (30) minutes in any hour;
- (b) Plus 5 dBA for a cumulative period of more than fifteen (15) minutes in any hour;
- (c) Plus 10 dBA for a cumulative period of more than five (5) minutes in any hour;
- (d) Plus 15 dBA for a cumulative period of more than one (1) minute in any hour; or
- (e) Plus 20 dBA for any period of time.

In the event the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

SOURCE: City of Huntington Beach 2001

**Table 3.10-8 City of Huntington Beach Noise Ordinance Interior Noise Standards**

| Noise Zone | Noise Zone Land Uses   | Noise Level                        | Time Period                            |
|------------|--|------------------------------------|--|
| 1          | All Residential Properties   | 55 dBA $L_{eq}$<br>45 dBA $L_{eq}$ | 7 A.M. to 10 P.M.<br>10 A.M. to 7 A.M. |
| 2, 3, 4    | All Professional Office, Public Institutional, Commercial, and Industrial Properties | 55 dBA $L_{eq}$                    | Anytime                                |

**Interior Noise Levels Prohibited:**

It shall be unlawful for any person at any location within the incorporated area of the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured within any other structure on any residential, public institutional, professional, commercial or industrial property to exceed:

- (a) The noise standard for a cumulative period or more than five (5) minutes in any hour;
- (b) The noise standard plus 5 dBA for a cumulative period of more than one (1) minutes in any hour; or
- (c) The noise standard plus 10 dBA for any period of time.

In the event the ambient noise level exceeds any of the first two noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the third noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

SOURCE: City of Huntington Beach 2001

The Noise Ordinance exempts noise sources associated with construction activities from the City's exterior and interior noise standards provided that a permit has been obtained from the City and that the construction activities do not occur between the hours of 8 P.M. and 7 A.M. on weekdays and Saturdays, or at any time on Sundays or federal holidays.

### 3.10.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2002 *CEQA Guidelines*, the *Huntington Beach General Plan*, and the *Huntington Beach Municipal Code*. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on noise if it would result in any of the following:

- Expose nearby noise sensitive uses to temporary or periodic noise levels during construction that exceed Huntington Beach Municipal Code standards
- Expose nearby sensitive uses to excessive groundborne vibration levels. This analysis uses the Federal Railway Administration's vibration impact thresholds for sensitive buildings, residences, and institutional land uses. These thresholds are 80 VdB at residences and buildings where people normally sleep (e.g., nearby residences and day care facility) and 83 VdB at institutional buildings
- Expose the outdoor activity areas of new residential land uses on site to noise levels resulting from public roadways that exceed 60 dBA  $L_{dn}$
- Expose the interior areas of new residential or hotel land uses on site to noise levels resulting from public roadways that exceed 45 dBA  $L_{dn}$
- Violate the City's exterior noise level standards for locally regulated noise sources as identified previously in Table 3.10-7
- Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. For the purpose of this analysis, a permanent increase of 3.0 dBA  $L_{dn}$  over ambient noise levels without the project is considered to be substantial

### 3.10.4 Project Impacts

**Impact N-1      Construction activities associated with the proposed project could generate substantial temporary or periodic noise levels, but would not exceed the standards established in the Huntington Beach Municipal Code.**

Project development would require the use of heavy equipment for site grading and excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of development there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The U.S. EPA has compiled data regarding the noise generating characteristics of specific types of construction equipment and typical construction activities. These data are presented in Table 3.10-9 and Table 3.10-10 for a reference distance of 50 feet. These noise levels would diminish rapidly with distance

from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 84 dBA measured at 50 feet from the noise source to the receptor would reduce to 78 dBA at 100 feet from the source to the receptor, and reduce by another 6 dBA to 72 dBA at 200 feet from the source to the receptor.

**Table 3.10-9 Noise Ranges of Typical Construction Equipment**

| <b>Construction Equipment</b>   | <b>Noise Levels in dBA Leq at 50 feet<sup>1</sup></b> |
|---|---|
| Front Loader  | 73–86   |
| Trucks  | 82–95   |
| Cranes (moveable)   | 75–88   |
| Cranes (derrick)  | 86–89   |
| Vibrator  | 68–82   |
| Saws  | 72–82   |
| Pneumatic Impact Equipment  | 83–88   |
| Jackhammers   | 81–98   |
| Pumps   | 68–72   |
| Generators  | 71–83   |
| Compressors   | 75–87   |
| Concrete Mixers   | 75–88   |
| Concrete Pumps  | 81–85   |
| Back Hoe  | 73–95   |
| Pile Driving (peaks)  | 95–107  |
| Tractor   | 77–98   |
| Scraper/Grader  | 80–93   |
| Paver   | 85–88   |
| 1. Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table. |   |

SOURCE: U.S. EPA 1971

**Table 3.10-10 Typical Outdoor Construction Noise Levels**

| <b>Construction Phase</b> | <b>Noise Levels at 50 Feet<br/>(dBA L<sub>eq</sub>)</b> | <b>Noise Levels at 50 Feet with Mufflers<br/>(dBA L<sub>eq</sub>)</b> |
|---------------------------|---|---|
| Ground Clearing           | 84  | 82  |
| Excavation, Grading       | 89  | 86  |
| Foundations               | 78  | 77  |
| Structural                | 85  | 83  |
| Finishing                 | 89  | 86  |

SOURCE: U.S. EPA 1971

The nearest sensitive receptors are the existing residences located west of First Street (approximately 75 feet from the project site), the existing residences located north of Atlanta Avenue (approximately 60 feet north of the project site), and the existing residences located east of Huntington Street (approximately 60 feet from the project site). Construction activities would generate typical noise levels of up to 82 dBA  $L_{eq}$  at these residences during ground clearing, and 87 dBA  $L_{eq}$  at these residences during excavation, grading and finishing. Most of the types of exterior construction activities associated with the proposed project would not generate continuously high noise levels, although occasional single-event disturbances from grading and construction are possible. The highest potential noise levels would be associated with pile driving operations that would occur at intermittent times throughout the construction period. Noise from pile driving would be approximately 95 to 107 dBA  $L_{eq}$  at 50 feet. The construction activities and their associated noise levels would be limited to between the hours of 7:00 A.M. and 8:00 P.M. on Monday through Saturday in accordance with the Huntington Beach Municipal Code and are temporary in nature. Additionally, the City's Municipal Code exempts construction noise from the requirements of the Municipal Code. Therefore, this impact would be less than significant.

**Impact N-2 Construction activities associated with the proposed project would not generate or expose persons off site to excessive groundborne vibration.**

Construction activities that would occur under the proposed project have the potential to generate low levels of groundborne vibration. Table 3.10-11 identifies various vibration velocity levels for the types of construction equipment that would operate at the project site during construction.

**Table 3.10-11 Vibration Source Levels for Construction Equipment**

| Construction Equipment | Approximate VdB |         |         |         |          |
|------------------------|-----------------|---------|---------|---------|----------|
|                        | 25 Feet         | 50 Feet | 60 Feet | 75 Feet | 100 Feet |
| Pile Driver (impact)   | 104             | 98      | 96      | 94      | 91       |
| Large Bulldozer        | 87              | 81      | 79      | 77      | 75       |
| Loaded Trucks          | 86              | 80      | 78      | 76      | 74       |
| Jackhammer             | 79              | 73      | 71      | 69      | 67       |
| Small Bulldozer        | 58              | 52      | 50      | 48      | 46       |

SOURCE: Federal Railroad Administration 1998; EIP Associates 2003

Construction activities would primarily impact the existing residences located west of First Street, north of Atlanta Avenue, and east of Huntington Street. These residences are located at least 60 feet from the edge of the project site. However, roadway construction would occur within 25 feet of the homes for short periods of time. Based on the information presented in Table 3.10-11, vibration levels could reach up to 96 VdB at the properties located across the streets from the project site. This would exceed the 80 VdB threshold for residences and buildings where people normally sleep. However, the construction activities and their



associated noise levels would be limited to between the hours of 7:00 A.M. and 8:00 P.M. on Monday through Saturday in accordance with the Huntington Beach Municipal Code. Therefore, they would not occur during recognized sleep hours for residences. Therefore, this impact would be less than significant.

**Impact N-3      Implementation of the proposed project could expose new residential land uses on site to noise levels in excess of City standards.**

Future noise levels within the project site would continue to be dominated by vehicular traffic on the adjacent roadways. Other sources of noise would include new stationary sources (such as rooftop heating, ventilation, and air conditioning equipment) and increased activity throughout the site. Table 3.10-12 presents the future average daily exterior and interior noise levels associated with these roadways.

### ***Residential Uses***

As shown in Table 3.10-12, future exterior noise levels at the multifamily units planned along First Street, Atlanta Avenue, and Pacific View Avenue could just barely exceed the City's 60 dBA  $L_{dn}$  standard for outdoor activity areas. In the case of the proposed residential uses, these noise levels would apply to the actual outdoor activity areas (i.e., private yards and balconies) of each residential unit that faces these roadways. This is a potentially significant impact.

Exterior roadway noise levels due to traffic would not exceed City standards at the residential units located along Huntington Avenue. This is a less-than-significant impact.

As discussed previously, exterior-to-interior reduction of newer residential units is generally 30 dBA or more. With this assumption, Table 3.10-12 indicates that future noise levels associated with the surrounding roadways would not exceed the City's 45 dBA  $L_{dn}$  interior noise standard for residential uses. Therefore, this is a less-than-significant impact.

Heating, ventilation, and air conditioning (HVAC) systems would be installed for the new residential buildings located within the project site. Residential HVAC systems result in noise levels that average between 40 and 50 dBA  $L_{eq}$  at 50 feet from the equipment. These noise levels would not exceed the City's exterior noise level standards for locally regulated noise sources as identified previously in Table 3.10-7. This is a less-than-significant impact.

Table 3.10-12 Predicted Future Roadway Noise Levels On Site

| Roadway               | Roadway Segment                        | Proposed Land Use     | Noise Levels in dBA L <sub>dn</sub>                    |                               |  |                              |                               |
|-----------------------|--|-----------------------|--|-------------------------------|--|------------------------------|-------------------------------|
|                       |  |                       | Future <sup>1</sup> Exterior Noise Levels <sup>2</sup> | City Exterior Noise Standards | Assumed Exterior to Interior Noise Reduction | Future Interior Noise Levels | City Interior Noise Standards |
| First Street          | Atlanta Ave. to Pacific Coast Hwy.     | Multifamily (70 feet) | 60.1   | 60.0                          | 30   | 30.1                         | 45.0                          |
|                       |  | Commercial (70 feet)  | 60.7   | None                          | 25   | 35.7                         | None                          |
| Atlanta Avenue        | 1 <sup>st</sup> St. to Huntington Ave. | Multifamily (80 feet) | 60.7   | 60.0                          | 30   | 30.7                         | 45.0                          |
| Huntington Avenue     | Atlanta Ave. to Pacific Coast Hwy.     | Multifamily (45 feet) | 59.4   | 60.0                          | 30   | 29.4                         | 45.0                          |
|                       |  | Hotel (80 feet)       | 56.7   | None                          | 25   | 31.7                         | 45.0                          |
| Pacific Coast Highway | Huntington Ave. to 1 <sup>st</sup> St. | Hotel (90 feet)       | 69.7   | None                          | 25   | 44.7                         | 45.0                          |
|                       |  | Commercial (90 feet)  | 69.7   | None                          | 25   | 44.7                         | None                          |
| Pacific View Avenue   | Huntington Ave. to 1 <sup>st</sup> St. | Multifamily (60 feet) | 60.8   | 60.0                          | 30   | 30.8                         | 45.0                          |
|                       |  | Hotel (60 feet)       | 61.0   | None                          | 25   | 36.0                         | 45.0                          |
|                       |  | Commercial (70 feet)  | 60.2   | None                          | 25   | 35.2                         | None                          |

<sup>1</sup> Future traffic condition is the General Plan with project traffic volumes identified in the Traffic Impact Analysis Report prepared by Linscott Law & Greenspan, 2003a.

<sup>2</sup> Noise levels are calculated for the edge of the building nearest the roadway noise source.

SOURCE: EIP Associates 2003. Calculation data and results are provided in Appendix C.

## ***Hotel and Visitor-Serving Commercial Uses***

Because the rooms in hotels often provide large windows along the walls that face outdoors, this analysis assumes that the exterior-to-interior noise level reduction for the proposed hotel would be approximately 25 dBA. With this assumption, Table 3.10-12 indicates that future noise levels associated with the surrounding roadways would not exceed the City's 45 dBA  $L_{dn}$  interior standard for noise sensitive uses. This is a less-than-significant impact.

HVAC systems would be installed for the new hotel and visitor-serving commercial buildings located within the project site. Large HVAC systems can result in noise levels that average between 50 and 65 dBA  $L_{eq}$  at 50 feet from the equipment. The HVAC units would be mounted on the rooftops of the proposed buildings and would be screened from view by building features. Therefore, the resulting noise levels would not exceed City standards at nearby buildings. This is a less-than-significant impact.

Intermittent noise levels would also occur in association with delivery vehicles and loading dock activities. Some—not all—of these vehicles could use warning devices (beeping tones) when backing up. Noise monitoring results for another loading dock identified an average noise level of 53.7 dBA  $L_{eq}$  at a distance of 45 feet from the loading dock. This noise level occurred with the operation of three delivery trucks, of which one was a lightweight van, one was a medium weight truck, and one was a tractor-trailer. Instantaneous noise levels monitored over two minutes while a tractor-trailer entered the area, turned, and backed-up to the loading dock averaged 62.0 dBA  $L_{eq}$ . A small truck using a back-up warning device averaged 70 dBA  $L_{eq}$  over the 30-second period that it backed up.

The two aboveground loading docks and ramp areas are located east and west of the motor court/porte cochere, one located off of Pacific View and the other off of First Street as shown in Figure 2-3a. They are approximately 160 feet from the nearest proposed residential building and would be screened from view from the residential areas by the commercial buildings. They would also be screened from the main entrances to the commercial uses. Based on this information, the noise levels associated with delivery vehicles and loading dock activities would not exceed City standards at nearby residential or commercial uses. This is a less-than-significant impact.

**Impact N-4      The proposed project would generate increased local traffic volumes, but would not cause a substantial permanent increase in ambient noise levels.**

Locations in the vicinity of the project site could experience slight changes in noise levels as a result of an increase in the on-site population and resulting increase in motor vehicle trips. The changes in future noise levels at the selected noise-sensitive locations along the study-area roadway segments in the project vicinity

are identified in Table 3.10-13. As shown, the proposed project would increase local noise levels by a maximum of 2.4 dBA  $L_{dn}$ , which is inaudible/imperceptible to most people and would not exceed the identified thresholds of significance. Therefore, this would be a less-than-significant impact. Along two roadway segments, future noise levels would actually be reduced as a result of changes in local circulation patterns that occur with the project.

**Table 3.10-13 Project Traffic Noise Impacts**

| Roadway               | Roadway Segment                             | Noise Levels in dBA $L_{dn}$   |                             |          | Significance Threshold |
|-----------------------|---|--------------------------------|-----------------------------|----------|------------------------|
|                       |   | Future Without Project Traffic | Future With Project Traffic | Increase |                        |
| Pacific Coast Highway | 17 <sup>th</sup> St. to 9 <sup>th</sup> St. | 67.9                           | 68.1                        | 0.2      | 3.0                    |
| Beach Boulevard       | Pacific Coast Hwy. to Atlanta Ave.          | 61.0                           | 61.6                        | 0.6      | 3.0                    |
|                       | Atlanta Ave. to Indianapolis Ave.           | 64.0                           | 64.6                        | 0.6      | 3.0                    |
|                       | Indianapolis Ave. to Adams Ave.             | 65.2                           | 65.7                        | 0.5      | 3.0                    |
| Lake Street           | Adams Ave. to Indianapolis Ave.             | 60.9                           | 61.1                        | 0.2      | 3.0                    |
| Indianapolis Avenue   | Beach Blvd. to Newland St.                  | 58.1                           | 58.2                        | 0.1      | 3.0                    |
| Atlanta Avenue        | Newland St. to Beach Blvd.                  | 62.9                           | 63.1                        | 0.2      | 3.0                    |
|                       | Beach Blvd. to Delaware St.                 | 65.2                           | 65.7                        | 0.5      | 3.0                    |
|                       | Delaware St. to Huntington Ave.             | 63.6                           | 64.3                        | 0.7      | 3.0                    |
|                       | Huntington Ave. to 1 <sup>st</sup> St.      | 61.8                           | 61.9                        | 0.1      | 3.0                    |
| Main Street           | Adams Ave. to Palm Ave.                     | 59.9                           | 58.2                        | -1.7     | 3.0                    |
| First Street          | Pacific Coast Hwy. to Atlanta Ave.          | 56.2                           | 58.6                        | 2.4      | 3.0                    |
| Huntington Avenue     | Pacific Coast Hwy. to Atlanta Ave.          | 56.2                           | 55.1                        | -1.1     | 3.0                    |

SOURCE: EIP Associates 2003. Calculation data and results are provided in Appendix C.

### 3.10.5 Cumulative Impacts

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to the proposed project and other projects within the study area. Therefore, cumulative traffic-generated noise impacts have been assessed based on the contribution of the proposed project to the future cumulative base traffic volumes in the project vicinity. The noise levels associated with existing traffic volumes, cumulative base traffic volumes without the project, and cumulative base traffic volumes with the project are identified in Table 3.10-14 along with the contribution of traffic noise generated by the proposed project.

Table 3.10-14 Cumulative Project Roadway Traffic Noise Impacts

| Roadway               | Roadway Segment                             | Noise Levels in dBA L <sub>dn</sub> |                         |                              |                     | Project Contribution | Significance Threshold |
|-----------------------|---|-------------------------------------|-------------------------|------------------------------|---------------------|----------------------|------------------------|
|                       |   | Existing Traffic Volumes            | Cumulative Base Traffic | Cumulative + Project Traffic | Cumulative Increase |                      |                        |
| Pacific Coast Highway | 17 <sup>th</sup> St. to 9 <sup>th</sup> St. | 67.3                                | 68.6                    | 68.8                         | 1.5                 | 0.2                  | 3.0                    |
| Beach Boulevard       | Pacific Coast Hwy. to Atlanta Ave.          | 59.7                                | 62.2                    | 62.7                         | 3.0                 | 0.5                  | 3.0                    |
|                       | Atlanta Ave. to Indianapolis Ave.           | 63.1                                | 65.0                    | 65.4                         | 2.3                 | 0.4                  | 3.0                    |
|                       | Indianapolis Ave. to Adams Ave.             | 64.6                                | 65.5                    | 66.0                         | 1.4                 | 0.5                  | 3.0                    |
| Lake Street           | Adams Ave. to Indianapolis Ave.             | 60.6                                | 61.2                    | 61.4                         | 0.8                 | 0.2                  | 3.0                    |
| Indianapolis Avenue   | Beach Blvd. to Newland St.                  | 57.6                                | 59.2                    | 59.3                         | 1.7                 | 0.1                  | 3.0                    |
| Atlanta Avenue        | Newland St. to Beach Blvd.                  | 62.3                                | 63.1                    | 63.2                         | 0.9                 | 0.1                  | 3.0                    |
|                       | Beach Blvd. to Delaware St.                 | 64.8                                | 63.6                    | 64.2                         | -0.6                | 0.6                  | 3.0                    |
|                       | Delaware St. to Huntington Ave.             | 63.1                                | 63.6                    | 64.3                         | 1.2                 | 0.7                  | 3.0                    |
|                       | Huntington Ave. to 1 <sup>st</sup> St.      | 61.3                                | 62.5                    | 62.6                         | 1.3                 | 0.1                  | 3.0                    |
| Main Street           | Adams Ave. to Palm Ave.                     | 58.7                                | 60.9                    | 61.3                         | 2.6                 | 0.4                  | 3.0                    |
| First Street          | Pacific Coast Hwy. to Atlanta Ave.          | 59.4                                | 56.2                    | 57.6                         | -1.8                | 0.6                  | 3.0                    |
| Huntington Avenue     | Pacific Coast Hwy. to Atlanta Ave.          | 54.4                                | 52.2                    | 54.4                         | 0.0                 | 2.2                  | 3.0                    |

SOURCE: EIP Associates 2003. Calculation data and results are provided in Appendix C.

As shown, cumulative development would result in noise level increases of 0.0 to 3.0 dBA  $L_{dn}$  along the studied roadways, with the maximum increase occurring along Beach Boulevard from PCH to Atlanta Avenue. The future noise levels along two roadway segments would actually be reduced as a result of changes in local circulation patterns that occur under the Hunting Beach General Plan. The contribution of the proposed project would range from 0.1 dBA to 2.2 dBA. Of the 3.0 dBA increase along Beach Boulevard, the contribution of the proposed project would be 0.5 dBA. The 0.1 dBA to 2.2 dBA contribution of the proposed project to future roadway noise levels would not exceed the identified thresholds of significance and, therefore, would not be cumulatively considerable.

### **3.10.6 Mitigation Measures and Residual Impacts**

The following standard City requirements (CR) would apply to the project.

- |        |   |
|--------|---|
| CR N-A | <i>Construction shall be limited to Monday–Saturday 7:00 A.M.–8:00 P.M. Construction shall be prohibited Sundays and Federal holidays.</i>  |
| CR N-B | <i>The Applicant shall notify all property owners and tenants within 300 feet of the perimeter of the property of a tentative grading schedule at least 30 days prior to such grading.</i>  |
| CR N-C | <i>The developer shall coordinate the development of a truck haul route with the Department of Public Works if the import or export of material is required. This plan shall include the approximate number of truck trips and the proposed truck haul routes. It shall specify the hours in which transport activities can occur and methods to mitigate construction-related impacts to adjacent residents. These plans must be submitted for approval to the Department of Public Works prior to issuance of a precise grading permit.</i>   |
| CR N-D | <i>All haul trucks shall arrive at the site no earlier than 8:00 A.M. or leave the site no later than 5:00 P.M., and shall be limited to Monday through Friday only.</i>  |
| CR N-E | <i>Neighbors within 200 feet of major construction areas shall be notified of the construction schedule in writing prior to construction; the project sponsor shall designate a “disturbance coordinator” who shall be responsible for responding to any local complaints regarding construction noise; the coordinator (who may be an employee of the developer or general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented; and a telephone number for the noise disturbance coordinator shall be posted conspicuously at the construction site fence and included on the notification sent to neighbors adjacent to the site.</i> |

In addition to the standard City requirements listed above, mitigation measures (MM) would address impacts. Due to the potential noise level generated by pile driving activities and the proximity of residential receptors to the project site, the following mitigation measure is recommended to further reduce construction noise impacts identified under Impact N-1.

*MM N-1                      Pile driving activities shall be limited to the hours of 8:00 A.M to 6:00 P.M Monday through Friday.*

The following mitigation measures would be required to address potentially significant operational noise impacts, as described under Impact N-3.

*MM N-2                      Prior to the issuance of building permits for the new multifamily residential units located along First Street, Atlanta Avenue, and Pacific View Avenue, the project developer(s) shall submit building plans that identify walls or barriers of at least 5.5 feet above the ground surface around each exterior activity area (i.e., private yards, balconies and recreation areas) that face these roadways. This can be accomplished by constructing solid walls that match the building exterior and topping them off with 1.5-inch-thick Plexiglas windows or sheets to meet the height requirement of 5.5 feet. Other means of reducing exterior noise levels to 60 dBA  $L_{dn}$  or less within the exterior activity areas may be implemented so long as an acoustical analysis demonstrates that the alternative means would in fact reduce the noise to the required level.*

MM N-2 would reduce the noise level impacts of the proposed project as described under Impact N-3 to less-than-significant levels. All other potential noise impacts of the project as described above under Impact N-1, Impact N-2, and Impact N-4 would be less than significant.